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AMENDMENT

APPENDIX: Claims as pending upon entry of the amendment

1. (amended) A method for inducing an immune response against transformed, infected or diseased tissue in a patient comprising

removing soluble cytokine receptor molecules selected from the group consisting of soluble tissue necrosis factor receptor-1 ("sTNFR-1"), soluble tissue necrosis factor receptor-2 ("sTNFR-2"), soluble interleukin-2 receptor ("sIL-2R"), soluble interleukin-1 receptor ("sIL-1R"), soluble interleukin-6 receptor ("sIL-6R"), and soluble interferon-gamma receptor ("sIFN-gammaR") in the blood of the patient having a molecular weight of 120,000 daltons or less, until the transformed, infected, or diseased tissue is reduced in amount.

- 2. The method of claim 1 wherein the tissue is a solid tumor.
- 3. The method of claim 1 wherein the components are removed from one blood volume.
- 4. The method of claim 1 wherein the components are removed in multiple treatments. Please cancel claims 5-7.
- 7. (amended) The method of claim 1 wherein the soluble cytokine receptor molecules are removed by binding of the molecules to a filter.
- 8. (amended) The method of claim 7 wherein the soluble cytokine receptor molecules are selected from the group consisting of soluble tissue necrosis factor receptor-1 ("sTNFR-1") and soluble tissue necrosis factor receptor-2 ("sTNFR-2").
- 9. The method of claim 8 wherein the cytokine receptor molecules are removed by binding to the cytokine or to an antibody or antibody fragment immunoreactive with the cytokine receptor molecules.
- 10. The method of claim 9 wherein the cytokine or antibody or antibody fragments are immobilized in a filter or column through which the patient's blood or plasma is circulated prior to being returned to the patient.
- 11. The method of claim 1 further comprising vaccinating the patient with a vaccine against the transformed, infected or diseased tissue.
- 12. (amended) A system for inducing an immune response against transformed, infected or diseased tissue comprising

a device for removing only components present in the blood having a molecular weight of 120,000 daltons or less, having inlet and outlet means for connection to a pump and tubing to recirculate the blood of a patient through the device, having immobilized therein absorbents selectively removing specific cytokine or cellular inhibitors selected from the group consisting of soluble tissue necrosis factor receptor-1 ("sTNFR-1"), soluble tissue necrosis factor receptor-2 ("sTNFR-2"), soluble interleukin-2 receptor ("sIL-2R"), soluble interleukin-1 receptor ("sIL-1R"), soluble interleukin-6 receptor ("sIL-6R"), and soluble interferon-gamma receptor ("sIFN-gammaR") from the blood.

- 13. The system of claim 12 wherein the device is a capillary membrane filter with a pore size of between about 0.02 and 0.05 microns.
- 14. The system of claim 12 wherein the device is a parallel plate filter with a pore size of between about 0.04 and 0.08 microns.
- 15. The system of claim 12 wherein the device comprises filters with different pore sizes or geometries to provide for staggered removal of materials from the blood.
- 16. The system of claim 12 wherein the device is an absorbent column selectively removing specific cytokine or cellular inhibitors from the blood.

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- 17. (amended) The system of claim 16 wherein the cytokine or cellular inhibitors are selected from the group consisting of soluble tissue necrosis factor receptor-1 ("sTNFR-1") and soluble tissue necrosis factor receptor-2 ("sTNFR-2").
- 18. The system of claim 17 comprising cytokines or antibody or antibody fragments immunoreactive with the cytokine receptor molecules.
- 19. The system of claim 18 wherein the cytokine or antibody or antibody fragments are immobilized in a filter or column through which the patient's blood or plasma is circulated prior to being returned to the patient.
- 20. The system of claim 12 wherein the blood is plasma.
- 21. The system of claim 12 wherein the system includes means for administering radiation to the tissue.

Please cancel claims 22-32.